

| Description                            |                                 |            | Specifications   |
|--|---------------------------------|------------|--|
| CRT                                    | Configuration and useful screen |            | 6-inch rectangular screen with internal graticule :8X10 Div (1 div=1Cm). marking for measurement of rise time 2mm subdivisions along the central axis.   |
|  | Acceleration potential          |            | +1.9KV apporx.(ref. cathode)   |
|  | Phosphor                        |            | P43  |
|  | Focussing                       |            | Possible   |
|  | Trace rotation                  |            | provided   |
|  | Intensity control               |            | provided   |
| Z-AXIS INPUT<br>(INTENSITY MODULATION) | Input signal                    |            | Positive going signal decreases intensity +5Vp-p or more signal cases noticeable modulation at normal intensity settings.  |
|  | Band-width                      |            | DC to 2MHz(-3dB)   |
|  | Coupling                        |            | DC   |
|  | Input impedance                 |            | 20k $\Omega$ -30k $\Omega$ typical   |
|  | Maximum input voltage           |            | 30V(DC+peak AC)  |
| VERTICAL DEFLECTION                    | Band Width(-3dB)                | DC coupled | DC to 20MHz normal / DC to 10MHz magnified(CH1 only)   |
|  |                                 | AC coupled | 10Hz to 20MHz normal / 10Hz to 10MHz magnified(CH1 only)   |
|  | Modes                           |            | CH1,CH2,ADD,DUAL(CHOP; Time/div switch -0.2s to 1mS, ALT ; Time/div switch -0.5mS to 0.2 $\mu$ S)  |
|  | Deflection Factor               |            | 5mV/div to 5V/div in 10 calibrated steps of a 1-2-5 sequence.<br>Continuously variable between steps at least 1:2.5 x5 MAG ; 1mV/div to 1V/div in 10 calibrated steps. (CH1 only)<br>50mv/div to 50V/div(with 10:1 Probe used) |
|  | Accuracy                        |            | normal ; $\pm 3\%$ , magnified: $\pm 5\%$ (CH1 only)   |
|  | Input impedance                 |            | approx. 1M $\Omega$ in parallel with 30pF  |
|  | Maximum input voltage           |            | Direct;250V(DC+peak AC), with probe; refer to probe specification  |
|  | Input coupling                  |            | DC - GND - AC  |
|  | Rise time                       |            | 17.5nS or less(35nS or less; x5 MAG)   |
|  | CH1 out                         |            | 25mV/div into 50 $\Omega$ ; DC to 10MHz(-3dB)  |
|  | Polarity inversion              |            | CH2 only   |
| HORIZONTAL DEFLECTION                  | Display modes                   |            | NORM , X-Y, x10, VARIABLE  |
|  | Time base                       |            | 0.2us/div to 0.2S/div in 19 calibrated steps, 1-2-5 sequence.<br>uncalibrated continuous control between steps at least 1:2.5  |
|  | Sweep magnification             |            | 10 times (maximum sweep rate ; 20nS/div)   |

|                                  |                           |                          |  |                 |                   |              |         |               |           |  |
|----------------------------------|---------------------------|--------------------------|--|-----------------|-------------------|--------------|---------|---------------|-----------|--|
|                                  | Accuracy                  |                          | ±3%, ±5% (0&degC to 40&degC), additional error for magnifier ±2%<br>Note ; 50nS/div, 20nS/div (±10%)   |                 |                   |              |         |               |           |  |
| TRIGGER SYSTEM                   | Modes                     |                          | auto, norm, TV-V, TV-H   |                 |                   |              |         |               |           |  |
|                                  | Source                    |                          | VERT, CH1, LINE, EXT   |                 |                   |              |         |               |           |  |
|                                  | Coupling                  |                          | AC   |                 |                   |              |         |               |           |  |
|                                  | Slope                     |                          | + or -   |                 |                   |              |         |               |           |  |
|                                  | Sensitivity and Frequency | AUTO, NORM               |  | 20Hz-2MHz(VERT) | 20Hz-20MHz (VERT) |              |         |               |           |  |
|                                  |                           |                          | INT  | 0.5 div (2 div) | 1.5 div (3 div)   |              |         |               |           |  |
|                                  |                           |                          | EXT  | 0.2 Vp-p        |                   |              |         |               |           |  |
|                                  |                           |                          | 0.6Vp-p  |                 |                   |              |         |               |           |  |
|                                  | TV-V, TV-H                | at least 1div or 1.0Vp-p |  |                 |                   |              |         |               |           |  |
| External trigger input impedance |                           | 1MΩ ±10%                 |  |                 |                   |              |         |               |           |  |
| Max. input voltage               |                           | 250V (DC + peak AC)      |  |                 |                   |              |         |               |           |  |
| X-Y OPERATION                    | X-axis                    |                          | (same as CH1 except for the following)<br>Deflection factor ; same as that of CH1 / Accuracy ; ±5% /<br>Frequency response ; DC to 500KHz (-3dB)                 |                 |                   |              |         |               |           |  |
|                                  | Y-axis                    |                          | same as CH2  |                 |                   |              |         |               |           |  |
|                                  | X-Y phase difference      |                          | 3° or less (at DC to 50KHz)  |                 |                   |              |         |               |           |  |
| CALIBRATOR                       | Probe Adjustment          |                          | approx. 1KHz frequency (±20%),<br>0.5V(±10%)square wave duty ratio ; 40-50%  |                 |                   |              |         |               |           |  |
| POWER SUPPLY                     | Voltage Range             |                          | <table><tr><td>voltage range</td><td>fuse(250V)</td></tr><tr><td>115(98-125V)</td><td>125V 1A</td></tr><tr><td>230(198-250V)</td><td>250V 0.5V</td></tr></table> | voltage range   | fuse(250V)        | 115(98-125V) | 125V 1A | 230(198-250V) | 250V 0.5V |  |
|                                  | voltage range             | fuse(250V)               |  |                 |                   |              |         |               |           |  |
|                                  | 115(98-125V)              | 125V 1A                  |  |                 |                   |              |         |               |           |  |
| 230(198-250V)                    | 250V 0.5V                 |                          |  |                 |                   |              |         |               |           |  |
|                                  | Frequency                 |                          | 50 Hz / 60 Hz  |                 |                   |              |         |               |           |  |
|                                  | Power consumption         |                          | Approx. 42w  |                 |                   |              |         |               |           |  |
| PHYSICAL CHARACTERISTIC          | Dimension                 |                          | 316mm (W) X 143mm (H) x 406mm (L)  |                 |                   |              |         |               |           |  |
|                                  | Weight                    |                          | 7.8Kg  |                 |                   |              |         |               |           |  |
| ENVIRONMENTAL                    | Temperature               |                          | Temperature range for rated operation : +10&degC to +35&degC(+50&degF to 95&degF)  |                 |                   |              |         |               |           |  |
|                                  |                           |                          | Max. ambient operation temperature : &degC to +40&degC(+32&degF to +104&degF)  |                 |                   |              |         |               |           |  |
|                                  |                           |                          | MAX. storage temperature : -20&degC to +70&degC(-4&degF to +158&degF)  |                 |                   |              |         |               |           |  |
|                                  | Humidity                  |                          | Humidity range for rated operation: 45% to 85% RH<br>Max. ambient operating humidity : 35% to 85% RH   |                 |                   |              |         |               |           |  |
| SAFETY&EMC                       | SAFETY                    |                          | UL-1244, CSA-C22.2, IEC-1010-1   |                 |                   |              |         |               |           |  |
|                                  | EMC                       |                          | UEC-801-2.3.4.5  |                 |                   |              |         |               |           |  |